

REMARKS

The Office Action of October 21, 2008, has been carefully considered.

The specification has been amended to provide a reference to the prior filed PCT application.

Claims 1-5 have been rejected under 35 USC 102(b) as anticipated by Kilgore.

Claims 1-5 have now been canceled and replaced by a new set of Claims 6-12, written in better form for U.S. practice. Claim 6 is directed to a propulsion system for ships and other mobile marine structures, comprising a driving machine, a synchronous, permanent magnet electrical generator having an electrical output and a plurality of poles, powered directly by the driving machine, a synchronous, permanent magnet electrical propulsion motor having a plurality of poles, powered by the output of the electrical generator, with a fixed and direct electrical connection thereto, and a propeller or similar propulsion device operated by a mechanical connection to the electrical propulsion motor. The electrical generator and the electrical propulsion motor have substantially the same operating characteristics.

Applicants note that in the system shown in Fig. 1 of the application, the connection between the generator and propulsion motor is both fixed (no breaker in the circuit for optional alternate connection) and direct (no other elements interposed between the generator and propulsion motor).

Kilgore does disclose a combustion engine operating an electrical generator, the output of which is used to operate a synchronous motor which turns a propeller. However, the details of the structure are different from the system which is presently claimed.

For example, according to Kilgore, a gear box is interposed between the driving machine and the generator to

change the velocity of the drive shaft. According to the claimed invention, to the contrary, the electrical generator is directly powered by the driving machine, eliminating the gearbox, and utilizing instead essentially a "electric" gear box with no losses.

Moreover, it is alleged in the Office action that the synchronous machines have substantially the same operating characteristics and are directly connected together with a rigid electrical connection 20.

As to the machines having the same operating characteristics, the Office action has not cited any passage in Kilgore which states that the operating characteristics are substantially the same.

Regarding the rigid electrical connection, Applicants note that the connection 20 is not a fixed and direct connection between the generator and the synchronous motor, but rather a connection optionally through a frequency converter. While it is possible to make a direct connection between the generator and the synchronous motor by the proper positioning of switchgears 18 and 44, the connection is certainly not permanent and the frequency converter is a necessary element of the invention of Kilgore. The frequency converter provides a variable ratio between the generator and the motor at low propeller speeds, avoiding the need to run the turbine at inefficiently low speeds or to provide mechanical reduction gearing during maneuvers requiring propeller reversals. The presence of the frequency converter reduces the need for the synchronous motor to be built with significant induction motor capabilities in order to perform adequately in situations where the generator and motor are not synchronized such as sudden stop propeller reversals, or when the ship is accelerated from a stationary condition. See column 4, lines 10-26 of Kilgore.

The claimed invention does not utilize any such frequency converter between the generator and the motor; to the extent that a frequency converter is present, it is connected between the generator and a consumption network, and is not interposed between the generator and propulsion motor. As can be seen in Fig. 1, there is no means provided to break the circuit between the generator and propulsion motor to incorporate any other circuit elements, and this clearly different from Kilgore.

Withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,



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